Microscope Lab Part 2

Purpose

1. Explain what stains are and why they are often used with biological materials.

2. Draw a cheek cell and identify its nucleus and plasma membrane.

3. Draw an *Elodea* cell and identify the chloroplasts and cell wall.

Materials

2 Slides	Elodea leaf
2 Cover Slips	Water
Tooth pick	
Methylene Blue	

Method

1. Gently scrape some cheek cells from the inside of your cheek with a clean, flat toothpick.

    Discard your toothpick immediately after use in the container provided.

2. Spread the scrapings in the middle of a clean slide. Wait until the slide dries before proceeding.

4. Put several drops of methylene blue on the cheek scrapings. Wait 2 minutes for the stain to take effect.

5. *Gently* rinse the methylene blue off the slide with water from a squirt bottle. (If you rinse too vigorously, you may wash the cells off, too.)

6. Use a paper towel to blot dry the bottom of the slide. Do not wipe the top!

7. Add a small drop of water to the cheek scrapings; then add a cover slip.

8. Examine your cheek cells under the compound microscope.

    Since the cells are still relatively transparent, adjust the aperture

    of the diaphragm to obtain maximum contrast.

9. Sketch the cheek cells in your lab journal and label the plasma membrane and nucleus.